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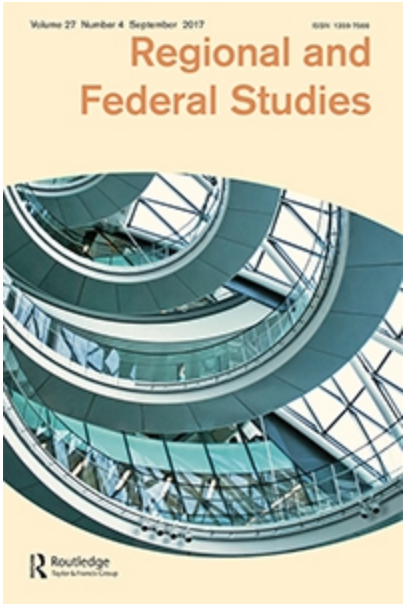
Published in:
Regional and Federal Studies

DOI:
10.1080/13597566.2019.1669567

Publication date:
2020

Document Version
Peer reviewed version



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Journal:	*Regional & Federal Studies*
Manuscript ID	FRFS-2019-0023.R3
Manuscript Type:	Original Article
Keywords:	modernisation, electoral and party contestation, Russian regions, Factor analysis, Cluster Analysis, regression analysis

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Abstract

This study examines the impact of modernization on the levels of electoral and party contestation in Russia's 85 regions. By employing cluster and regression analysis, our study shows that modernisation does have a positive impact on the degrees of political pluralism in Russia's regions. This applies not only to simple tools reflecting the levels of region-wide support for pluralism and a multiparty system, from the general population, but also the levels of support from the regional political elites). The study demonstrates that, the level of entrepreneurial activity is the main factor, which influences the levels of political pluralism.

Key words

modernisation, electoral and party contestation, Russian regions, cluster analysis, factor analysis, regression analysis.

In this article, we examine the impact of modernization on the levels of electoral and party contestation in Russia's 85 regions. Although Russia may be classified as an electoral authoritarian regime, and the Putin regime has sought to centralise power in the Kremlin, important regional variations in the degrees of democracy and authoritarianism can still be found across the federation (see Golosov 2012; Lankina 2016, Obydenkova and Libman 2013, 2015; Panov and Ross 2013, 2016, 2018; Moraski and Reisinger, 2003, Reisinger and Moraski 2010; Saikkonen 2016). In some territories there is hardly any independent politics at all (Chechnya), whilst in others, where civil society is more vibrant, the political monopoly of the

state bureaucracy is constantly challenged (these include, not only Moscow and St. Petersburg, but also, Perm, Sverdlovsk oblast, and Karelia). Regions also demonstrate significant cross-regional variations in their levels of political pluralism and support for the Kremlin's "party of power", United Russia (UR). The maximal powers of the state bureaucracy over the political process means that members of the executive branch are able to dominate the electoral process and deliver high margin victories to UR, particularly in the ethnic republics where "hegemonic authoritarian regimes" are most common. In contrast, in the more pluralistic "competitive authoritarian regimes" where a higher share of the votes goes to the opposition, the Kremlin's control over the elections is not as comprehensive (Panov and Ross 2013, 2018).

We should also stress that the current 85 federal subjects vary widely in the size of their territories and populations, their socio-economic status, and ethnic composition. Thus, for example, the territory of the Republic of Sakha is 2,803 times greater than that of Moscow. The population of Moscow in January 2016 (12,330,100) was 245 times greater than that of the Chukotka Autonomous Okrug (50,200). The average monthly per capita income, in the Republic of Ingushetiya was 14,683 roubles in January 2016, whilst in Yamalo-Nenets it was 4.5 times higher, at 66,869 roubles (*Regiony Rossii*, 2016, 18).

Modernisation, democracy and political pluralism

In a seminal article, Lipset summarised the relationship between modernisation and political change in his famous dictum, 'the more well-to-do a nation, the greater the chances it will sustain democracy' (1959). Lipset did not claim, 'that economic development would result in democracy, but rather that economics and democracy were strongly correlated, because along with economic development came a level of wealth, industrialisation, urbanisation and education that were all important indices of democracy' (Hood 2004, 36). Thus, he deliberately chose the title *Requisites of Democracy* rather than, *Prerequisites of Democracy*, 'indicating a

correlational, not causal, relationship between socio-economic development and democracy' (Wucherpfennig and Deutsch 2009, 2).

As Bernhagen (2009, 80) notes, the Lipset thesis 'has been repeatedly challenged, but time and time again it has been re-established against these challenges.' Thus, for example, whilst, 'Przeworksi and Limongi sought to demonstrate that modernisation only helps existing democracies to survive but does not help democracy to emerge… Boix and Stokes used the same data to show that modernisation operates in favour of both the emergence and the survival of democracy' (Ibid, 80-81). Likewise, Inglehart and Welzel have demonstrated that, 'the causal sequence works mainly from economic development to democratization. During early industrialization, authoritarian states are just as likely to attain high rates of growth as are democracies. But beyond a certain level, democracy becomes increasingly likely to emerge and survive' (2009a, 9).

For Inglehart, socio-economic development 'starts from technological innovations that increase labour productivity; it then brings occupational specialisation, rising educational levels, and rising income levels. It diversifies human interaction, shifting the emphasis from authority relations toward bargaining relations…broader political participation and more critical, less easily led publics' (2017, 134). As they become more economically secure, citizens move from supporting materialist values (with a stress on economic security) and espouse post-materialist values. They 'give priority to tolerance over conformity, autonomy over authority, equality over patriarchy, and expression over security' (Welzel and Inglehart 2009, 140). Moreover, 'Increased wealth also affects the political role of the middle class through changing the shape of the stratification structure so that it shifts from an elongated pyramid with a large lower-class base, to a diamond with a growing middle class' (Grugel 2002, 48). The creation of 'a large middle class plays a mitigating role in moderating conflict,

since it is able to reward the moderate and democratic parties and penalize extremist groups' (ibid). Middle class citizens in authoritarian regimes play an important role in pushing for democratic reforms and once established they protect and promote democratic values (Gontmakher and Ross 2015, Rosenfeld 2017). In a similar vein, Bernhagen notes that, 'Once a society reaches sufficient levels of wealth, technology, education, bureaucratic capacity, and a proliferation of individual and social political skills, its citizens become dissatisfied with paternalistic political authority and demand popular sovereignty' (2009, 109).

However, Inglehart acknowledges that the early more deterministic versions of modernization theory were too simplistic: As he notes, no one 'today expects that industrialization will automatically bring democratic institutions; communism and fascism also emerged from industrialization' (2013, 125). Moreover, 'the successful combination of authoritarian rule and market capitalism in some countries also suggests that the relationship between economic development and democratization implied by modernisation theory, although overall positive, may not be linear' (Bernhagen 2009, 111). In a similar vein, Treisman notes that, 'Economic development promotes political liberalization, but not in a smooth and incremental way. … Structural factors such as economic development shape political regimes, but not immediately and every year' (2015, 939-40).

As Inglehart stresses, 'Different societies follow different trajectories even when subject to the same forces of modernisation, because situation-specific factors, such as the cultural heritage of a given society also shape how a particular society develops' (2013, 136). A society's heritage 'whether shaped by Protestantism, Catholicism, Islam, Confucianism, or Communism—leaves a lasting imprint' (Ibid, 125) and value systems will ultimately, 'reflect the interaction between the driving forces of modernization and the persisting influence of tradition' (Ibid). Survey evidence demonstrates that in Russia, materialist values are still held

by a majority of the population. Only a small number of richer and better educated citizens residing in the major cities hold "post-materialist" values (Gontmakher and Ross 2015; Ross 2015).

We would also stress that another key factor, which will impact on democratisation is the level of social inequality. As Bernhagen notes, 'Democratization is inhibited by high levels of economic inequality as economic resources can be translated into political resources, and concentrated economic power enables elites to prevent political reforms that extend rights and, liberties to others.' (2009, 111). In addition, 'economic inequalities can generate resentment and frustrations among the disadvantaged, thereby eroding the sense of community and legitimacy upon which democracy is often thought to rest' (Ibid). These factors are particularly pertinent to the Russian case where very quickly former Soviet economic and political elites (the "nomenklatura") were able to gain control over the privatization process and enrich themselves, at the same time as there was a massive fall in the standard of living, with over one third of the population living in poverty by the mid-1990s. Russia continues to have one of the highest levels of social inequality in the world, and thus not surprisingly, for a majority of citizens, questions of economic security continues to take priority over those of democratic rights and freedoms (see, Levada Centre Poll, 5 March 2016: https://www.levada.ru/en/2016/04/05/stabilization-vs-democracy/).

Disaggregating Modernisation Indices

Whilst there is a general consensus that modernization has a positive influence on democracy, when we analyse its key features more closely (e.g., rising levels of GDP, income and property, education, urbanisation, advances in transportation, information and communications technology, etc), it is not clear 'which of these does exactly what to promote a country's chances of becoming and remaining democratic' (Welzel 2009, 81). Lipset acknowledged that

modernisation entailed much more than just economic growth and rising levels of prosperity and he was 'careful not to attribute direct marginal effects to any of the component variables precisely because they are so intertwined in reality' (Wucherpfennig and Deutsch 2009, 7).

For some scholars, economic growth is less important than other key aspects such as education and rising levels of literacy (Hadenius 1992). Thus, Wucherpfennig and Deutsch argue that a true test of the Lipset hypothesis should look beyond the relations between economic growth and prosperity and 'consider the joint effect of all components of modernization, or even their interaction' (Ibid), and this is exactly what we set out to achieve, in our examination of the impact of modernisation on party contestation, in Russia's regions. Moving beyond a study of the relationship between economic growth and democratization, we created a set of disaggregated indices (e.g., GDP, level of income, property, education, urbanisation, and entrepreneurial activity), which can be considered as key modernisation factors in the post-Soviet space, and we tested each of these, for their statistical significance. Our novel approach, we would argue, has allowed us to provide a more nuanced and fine-grained analysis, with greater explanatory power.

Clearly modernization has not brought about a liberal democracy in Russia, and Putin would appear to be moving the country more towards the institutionalisation of an authoritarian regime rather than a consolidated democracy (Gel'man 2015; Gill 2015). In this study we do not seek to provide a comprehensive study of democratization in Russia's regions. This area of research has already been extensively covered (see, Gaivoronskii 2015, Kynev 2017, Lankina 2016, Obydenkova and Libman 2013, 2015, Petrov and Titkov 2013, Titkov 2016). Our study has a more specific focus, on the impact of modernisation on electoral and party contestation.

Levels of Pluralism in Russian regions and factors of modernization

Russian parties do not fulfil many of the classic functions of parties in consolidated democracies. For example, they do not form governments and they exercise only a limited degree of control over the executive: in fact, many of their activities are under the close scrutiny and control of officials from the executive branch. But this does not mean that Russian parties do not fulfil any important functions. They participate in elections, define the political composition of legislatures, help to form the mass political consciousness, recruit political activists and strengthen the legitimacy of the Russian regime.

Methodology

The following four dependent variables were chosen for our study of the impact of modernisation on electoral and party contestation; 1) the number of parties that won more than 1% of the votes of regional electorates in the 2016 Duma election, 2) the percentage of votes for United Russia in the most recent elections to the regional assembly, 3) the effective number of electoral parties in the most recent elections to the regional assembly, 4) the effective number of parliamentary parties in the regional assembly.

Why are these attributes significant? The number of parties that won more than 1% of the votes from regional electorates in the 2016 Duma elections is important because regional administrations are interested in achieving maximal voting for United Russia in federal parliamentary elections.[1] Because of the specific rules which govern the party-list system and the formation of regional party lists, in some cases, a region can only obtain representation in

[1] It can be questioned why the share of 1% was chosen for this research purpose. Thresholds from 3% to 5% are usually the norm when analysing party list election results. We would argue that 3% makes sense when it comes to analysing more competitive political regimes. However, in Russia where the domination of the pro-government party (UR), is provided to a large extent artificially, with the help of the use of "administrative resources", such a threshold tends to level-out important difference between the regions and thus simplifies the overall picture. As a result, many nuances disappear. Lowering the bar to 1% helps us to avoid this problem.

the State Duma if the largest party – usually UR - wins more than 90% of the votes. This is particularly the case in those regions with a low number of voters – for example, Ingushetia. In the 2011 election it had the possibility of receiving one seat in the Duma, but only if one of the parties (the election was held exclusively by proportional representation) won enough votes – otherwise the mandate would be transferred to a "more successful" neighbouring region. In addition, we should also stress the fact that the Central Electoral Commission, with the backing of regional governors can block opposition parties from competing in elections (see, Kynev 2017a; Kynev, Lyubarev, and Maksimov 2017). Thus, in many cases opposition parties can only compete with the approval of the Kremlin.

The situation changes when it comes to regional elections because regional administrations are often interested in collaboration with local elites, and one way of doing this is to allow representatives of local elites to gain seats in regional assemblies, sometimes as allies and in some cases even as members of the opposition (Kynev 2017a; Turovsky 2015). Even in Chechnya where United Russia regularly wins over 90% of the votes in the Duma elections, several opposition parties are represented in its regional assembly. The effective number of electoral parties (ENEP) in regional elections helps to estimate not only the degree of such readiness, but also the strength of those elite groups which support opposition parties. Low voting for United Russia in regional elections, is not so much a sign of the strength of the opposition, as a reflection of the weakness of the "party of power". But if some parties receive almost the same share of votes as United Russia (increasing the effective number of electoral parties), it tells us that the opposition parties must have been strong enough to win the backing of local elites who supported their candidates in the regional assemblies. This would also suggest, that in those regions with higher degrees of party contestation, there are higher degrees of pluralism amongst the regional elites.

Finally, the effective number of parliamentary parties (ENPP) in regional legislatures is a distorted form of the ENEP which results from the process of converting votes into seats. It reflects the balance of power between the state bureaucracy and civil society in the struggle for control over regional assemblies. In both cases the effective number is calculated by the classical formula of Laakso and Taagepera (1979) – $N = 1/\sum_{i=1}^{n} p_i^2$ where p^i is the share of the total number of valid votes received by a party – and the formula of Golosov (2010): $N_p = \sum_{1}^{y} \frac{S_i}{S_i + S_1^2 + S_i^2}$, where x is a total number of parties in the system, S_i is the share of votes received by a party, and S_1 the share of the party winning first place at the election. The formula of Golosov has greater salience for the description of party systems with a dominant or hegemonic party, such as Russia, but it has lower dispersion and, as a consequence, less sensitivity. So, we use it primarily to carry out robust checks. In this study the data is subjected to correlation analysis (to detect the interdependence among the four rows of numbers), and cluster analysis (in order to rank Russian regions according to their levels of political pluralism. Regression analysis (step-wise multiple linear regression, OLS model) allows us to detect the dependence of the indicators on the modernization factors. Some characteristics of modernisation are employed as independent variables (predictors) – level of wealth, urbanisation, education and entrepreneurial activity – which define a region's level of modernization (these are discussed below).

The electoral data for calculations were taken from the official website of the Central Election Commission (http://www.cikrf.ru), the demographic and socioeconomic data – from the website of the Federal State Statistics Service (http://www.gks.ru), and the web-sites of Russia's 85 regional legislatures were consulted in order to calculate the effective numbers of parliamentary parties.

[Table 1 about here]

Variations in the levels of Political Pluralism in Russian regions

Table 1 demonstrates variations in the levels of support for political parties in elections to the State Duma. There are the 'capitals' (Moscow, Moscow Region and St. Petersburg) where the level of political pluralism is high: 11 parties here won more than 1% of the votes in the 2016 Duma election. Very close to them are Kaliningrad, Tomsk, and Yaroslavl oblasts and Nenets autonomous district (10 parties). In sharp contrast, there are regions where the number of parties which won over 1% of the votes are very small. Thus, for example, in the North Caucasian republics – Chechnya, Dagestan, Kabardino-Balkaria there were just three parties with more than 1% of the votes. Close to them are other ethnic republics (Karachay-Cherkessia, Mordovia, Tyva) and two specific Siberian regions – Kemerovo and Tyumen oblasts (four parties).

It is interesting to note that the three northern autonomous okrugs (districts) are placed on different poles. Whereas, the Nenets AO and Khanty-Mansiysk AO have the highest levels of political pluralism (10 and 9 parties correspondingly), Yamal-Nenets AO confirmed its reputation as one of the regions with a low level of support for a diverse set of parties (five). The reason for these differences, may be that the economics of the former two regions is based on oil mining whereas the economics of the latter – on gas mining. The gas mining in Yamal-Nenets AO is monopolized by Gazprom which has been able to exercise significant control over how its employees vote. The oil mining sector is not monopolized to such an extent, so its employees have more freedom of choice when voting.

Table 1 shows that the highest levels of electoral support for United Russia in regional elections are most commonly found in Russia's "hegemonic authoritarian" ethnic republics. Thus, for example, support for UR in Chechnya was 87.66%, in Tatarstan – 84.24%, Tyva – 84.03%, Mordovia – 83.7%. In addition, there was very high support for UR in Kemerovo

oblast (86.21%) and Sevastopol (76.67%). The lowest support for the party of power was in Moscow (24.21%). Here we need to consider the fact, that this was the only region where the election to the regional assembly (Moscow City Duma, 2014) was held exclusively in single-mandate districts rather than the more common PR party list system which was used in most regions. In some Single Member Districts (SMDs) the administration nominated its candidates as independents. In other SMDs, United Russia did not nominate any of its candidates at all – in order to allow some 'systemic opposition' parties (The Communist Party of the Russian Federation, The Liberal-Democratic Party of Russia, Rodina), to take up seats in the City Duma. Overall, United Russia fared much worse here than in those elections which employed a PR electoral system. Other territories with low voting for UR are the regions of the European North and North-West, Siberia, and the Far East - Karelia (33.2%), Altai krai (34.08%), Kirov oblast (35.9%), Amur oblast (35.93%), Omsk oblast (36.3%), Vologda oblast (37.27%), Krasnoyarsk krai (38.53%), Novgorod oblast (38.92%), Murmansk oblast (39.2%), and Primorye krai (39.47%).

The highest values for the effective number of electoral parties (ENEP) are found in Moscow (7.77 by Laakso–Taagepera, 4.4 by Golosov), Karelia (4.96 and 3.76), Yaroslavl oblast (4.75 and 3.29), Arkhangelsk oblast (4.67 and 3.32), Smolensk oblast (4.54 and 3.29), Krasnoyarsk krai (4.53 and 3.42), Murmansk oblast (4.42 and 3.32), St. Petersburg (4.39 and 3.16), Vologda oblast (4.34 and 3.38). The lowest values, in Chechnya (1.29 and 1.15), Kemerovo oblast (1.34 and 1.16), Tatarstan (1.4 and 1.2), Tyva (1.41 and 1.19), Mordovia (1.41 and 1.21), Sevastopol and Bashkortostan (both 1.68 and 1.35) (see Table 1).

Almost the same picture can be seen with the effective number of parliamentary parties (ENPP): the regions with the highest values are; Kaliningrad oblast (2.43 and 1.92), Primorye krai (2.23 and 1.73), Moscow (2.22 and 1.73), and Karelia (2.12 and 1.64): with the lowest

ones – Kemerovo oblast (1.09 and 1.05), Tyva (1.13 and 1.06), Mordovia, Crimea (both 1.14 and 1.07), Sevastopol (1.18 and 1.09), Bryansk oblast (1.2 and 1.1), and Chechnya (1.22 and 1.11) (see Table 1)

[Table 2 about here]

How do these data correspond to each other? Let us now turn to an examination of the correlation matrix (Table 2). First of all, we can see a very strong correlation between the effective numbers of parties calculated by the classical formula of Laakso and Taagepera and the method devised by Golosov – 0.963 in the case of ENEP and 0.999 in the case of ENPP. The percentage of votes for United Russia in regional elections has the same correlation with ENEP calculated by both formulas (-0.936) and almost the same with ENPP, but is a little higher in the case of the formula of Laakso and Taagepera (-0.707 vs -0.693). The Indices calculated by this formula are also higher when calculating the correlation with the number of parties with more than 1% in the 2016 Duma election. This shows, that the formula by Laakso and Taagepera is more sensitive for our research purposes, than the one created by Golosov.

The strongest (and negative) correlation between the percentage of votes for United Russia in regional elections and the effective number of electoral parties (-0.936) is in line with our expectations that, the higher the voting for the party of power, the lower will be the ENEP. The correlation between the effective numbers of electoral and parliamentary parties is not so strong (0.668 and 0.65). The dominance of United Russia in regional legislatures is often provided through co-optation of independents into UR's deputy groups; in some regions these deputies are more "independent" than in others, and the degree of such independence does not always correspond to the levels of voting for the "party of power" in the PR party list contests.

The relatively weak correlation between the number of parties with more than 1% of the votes in the Duma election and voting for United Russia in regional elections (-0.649)

confirms the hypothesis that regional administrations pursue different goals in different types of election. Whilst they seek to maximize voting for UR in federal elections, they often work to reach a compromise with local elites in regional contests (see Turovsky 2015). The low correlation between the number of parties with more than 1% of the votes in the Duma election and the effective number of parliamentary parties (0.368 and 0.364) indicates that there is a weak level of interdependence between popular support for a pluralistic party system and the actual level of political pluralism. Even when the population of a region shows some support for a more pluralistic party system, the ruling elite finds ways to manipulate the electoral system to guarantee the "party of power" a dominant position in the regional assemblies. It is important to stress that there is no legislature in Russia where United Russia does not hold a majority of the seats (see Ross 2018).

[Figure 1 about here]

The classification of Russian regions by their degree of party contestation produces the following hierarchical tree which is outlined in Figure 1. As can clearly be seen, it is possible to break down the regions into those with either two or four clusters. Superimposition of the K-means clustering results, by two and four clusters, detects a total of five clusters (Table 3). The first, and largest, cluster includes 37 regions.

[Table 3 about here]

The number of parties with more than 1% of the votes in the 2016 Duma election varies here, from six in Orenburg, Oryol oblast, and the Jewish autonomous oblast, to 11 in Moscow, Moscow oblast, and St. Petersburg; voting for United Russia in regional elections varies from 24.2% in Moscow to 47.4% in Yakutia; the effective number of electoral parties ranges from 3.26 in Oryol oblast to 7.77 in Moscow, and the effective number of parliamentary parties from 1.39 in Vladimir oblast to 2.43 in Kaliningrad oblast. The regions closest to the "average" in

the cluster (i.e. those nearest to the centre) are Smolensk, Arkhangelsk and Sverdlovsk oblasts, the most peripheral (furthest from the centre) – Moscow, Karelia, and Altai krai.

The second cluster includes 10 regions. The number of parties with more than 1% of the votes in the 2016 Duma election varies from six in Kalmykia and Chuvashia to nine in Samara oblast; voting for United Russia in the regional elections, ranges from 48.3% in Kamchatka krai to 54.9% in Nizhny Novgorod oblast, and the ENEP varies from 2.91 in Nizhny Novgorod oblast to 3.4 in Kalmykia; the ENPP – from 1.46 in Nizhny Novgorod, Samara, Lipetsk oblasts and Stavropol krai to 2.29 in Kalmykia. The closest to the centre of the cluster are Nizhny Novgorod and Lipetsk oblasts, the furthest – Kalmykia.

The third cluster includes 12 regions. The number of parties with more than 1% votes in the 2016 Duma election varies from four in Tyumen oblast to nine in Khabarovsk krai; voting for United Russia in regional elections ranges from 55.77% in Ivanovo oblast to 60.1% in Volgograd oblast; the ENEP – from 2.55 in Volgograd oblast to 2.93 in Ivanovo oblast; the ENPP – from 1.26 in Ulyanovsk oblast to 2.1 in North Ossetia. The closest to the centre of the cluster is Ivanovo oblast, the furthest –Volgograd oblast and North Ossetia.

The fourth cluster includes 16 regions. The number of parties with more than 1% votes in the 2016 Duma election varies from three in Kabardino-Balkaria to nine in Krasnodar krai; voting for United Russia in regional elections ranges from 61.66% in Chukotka to 71.9% in Bryansk oblast; the ENEP – from 1.89 in Bryansk oblast to 2.39 in Belgorod oblast; the ENPP – from 1.14 in Crimea to 2.06 in Chukotka. The closest to the centre are Mari El and Saratov oblast, the furthest – Kranodar krai and Bryansk oblast.

Finally, the last cluster consists of 11 regions. The number of parties with more than 1% votes in the 2016 Duma election varies from three in Dagestan and Chechnya to eight in Ingushetia; voting for United Russia in regional elections – from 73.2% in Karachay-

Cherkessia to 87.66% in Chechnya; the ENEP – from 1.29 in Chechnya to 1.8 in Karachay-Cherkessia; the ENPP – from 1.09 in Kemerovo oblast to 1.77 in Karachay-Cherkessia. The closest to the centre are Sevastopol and Bashkortostan, the furthest – Chechnya.

Thus, we can classify the first cluster as the most pluralistic, and the fifth as the least pluralistic. Other clusters occupy an intermediate position. It is interesting to compare this classification with that based on a cluster analysis of the cleavage structure of Russia's regions which was conducted on the eve of the 2011 Duma election (Korgunyuk 2015, pp. 484-485). The analysis detected the following five main groups:

1) The North Caucasian republics (Dagestan, Ingushetia, Chechnya, Kabardino-Balkaria, Karachay-Cherkessia and North Ossetia) where there was a high degree of electoral manipulation and electoral fraud.

2) Mordovia, Mari El, Tatarstan and Tyumen oblast where the Kremlin's use of 'administrative resources' trampled down free voting, and guaranteed high support for United Russia.

3) The so-called under-competitive cluster consisting of 19 regions: Adygea, Bashkortostan, Kalmykia, Tuva, Komi Republic, Republic of Altai, Chukotka, Yamal-Nenets AO, Belgorod, Bryansk, Voronezh, Kaluga, Kemerovo, Omsk, Orel, Penza, Saratov, Tambov and Ulyanovsk oblasts. The influence of 'administrative resources' is somewhat weaker here and the voting process is not so tightly controlled.

4) The most "average" cluster, makes up the largest group of regions (31): Moscow, Buryatia, Udmurtia, Khakassia, Chuvashia, Yakutia, Stavropol and Khabarovsk krais, Amur, Arkhangelsk (with the Nenets AO), Astrakhan, Volgograd, Irkutsk, Kaliningrad, Kursk, Lipetsk, Magadan, Nizhny Novgorod, Novgorod, Novosibirsk, Orenburg, Rostov, Ryazan, Samara, Smolensk, Tver, Tomsk, Tula, Chelyabinsk and Yaroslavl oblasts, Khanty-Mansi autonomous district, Jewish autonomous oblast. Krasnodar krai belongs, in essence, to this

group, too. The voting pattern here, depends on the choice of the electorate to a higher degree than in the previous cluster, and voting is more socially conditioned.

5) The most competitive cluster consisting of 20 regions: St. Petersburg, Karelia, Altai, Trans-Baikal, Kamchatka, Krasnoyarsk, Perm, Primorye krais, Vladimir, Vologda, Ivanovo, Kirov, Kostroma, Kurgan, Leningrad, Moscow, Murmansk, Pskov, Sakhalin and Sverdlovsk oblasts. The use of 'administrative resources' in these regions has the smallest (but still important) impact on voting.

We can see that the both classifications coincide as a whole, but differ in details. For instance, the least competitive 'multiparty' cluster includes most regions from the two least competitive 'cleavage' clusters, with the exception of Kabardino-Balkaria, Mari El, North Ossetia and so on. On the other hand, the most competitive 'multiparty' cluster includes almost all the regions from the most competitive 'cleavage' (with a few exceptions), but also 17 regions from the less competitive clusters. These results can easily be explained. The 'cleavage' classification relies exclusively on results of the 2011 Duma elections whilst the 'multiparty' study is based on the results of the 2016 federal elections, and also the 2012-17 regional elections. As mentioned above, the level of contestation in some territories is significantly higher in the regional elections than in the federal ones. One of the clearest examples of this can be found in North Ossetia where United Russia unconditionally dominates the electoral landscape in the federal elections but has a strong competitor, Patriots of Russia (*Patrioty Rossii*) in the regional contests.

It should be also noted that the results of our cluster analysis coincide by and large with the indicators of democracy ratings, and indices of Russian regions, carried out by Russian scholars (Gaivoronskii 2015; Kynev 2017; Petrov and Titkov 2013; Titkov 2016;). The indices

of Gaivoronskii (2015), Titkov (2016) and Kynev (2017), were calculated taking into account the effective number of electoral parties.[2]

Dozens of regions with the highest and lowest index values of democracy calculated by Titkov (2016, 99-100) correspond, as a whole, to the most and least competitive clusters noted above. The index consists of two components: the party competition's variable (effective number of effective parties calculated by the Laakso–Taagepera formula) and the feedback variable (voting turnout, voting against all candidates and parties, percentage of invalid bulletins). Our cluster analysis shows that the former component plays a crucial role in comparison to the latter one. So, it is party competition that has the highest impact on the level of democracy in Russian regions.

Political pluralism and factors of modernization

The Independent variables for the regression analysis, were selected according to the following criteria.

First, the criterion, "proportion of the urban population" was selected because cities are considered the engine of modernization.

Second, more modernized regions are more economically successful, the well-being of their population is higher, and their infrastructure is more developed. Thus, the following indicators were employed; "Gross Regional Output per capita", "investments in fixed capital per capita", "the share of unprofitable organizations", "the average monthly income per capita", "the number of personal cars per 1,000 people", "share of housing with hot water supply", "number of doctors per 10,000 people."

[2] Kynev and Titkov used the Laakso–Taagepera formula, Gaivoronskii – the Molinar formula.

Third, modernization implies a higher level of education and cultural development of the population. Hence, such characteristics as "the share of employees with higher education" and "number of museum visits per 1,000 people" were included.

Finally, modernization in the post-Soviet space is closely linked to the revival of entrepreneurial initiative. The USSR fell behind Western democracies in economic competition, not least because it replaced entrepreneurial initiative with bureaucratic control over the economy. Currently, the weak levels of entrepreneurial activity, is one of the main obstacles to modernization in post-Soviet states. Thus, we assume, that the more developed is the private sector of the economy, the more modernized is its territory. Hence, the indicators "number of small businesses per 10,000 people" and "share of enterprises in state and municipal ownership," were selected.

Correlation analysis of the independent variables, demonstrates that the indicator "investments in fixed capital per capita" appeared to have a strong correlation (0.947) with the indicator "Gross Regional Output per capita"; the latter, in turn, had a strong correlation with the "average monthly income per capita" (0.802). We tested these three indicators in a number of different models, but it turned out that, neither was a predictor of the level of political pluralism in Russian regions.

The indicator, "number of museum visits per 1,000 people" was excluded from the analysis, as it was an outlier.

For the indicators, "the percentage of votes for United Russia in regional elections" and "the effective number of electoral parties" as dependent variables, the case of Moscow was excluded from the regression analysis. As mentioned above, the election to the Moscow City Duma (2014) was held exclusively in single-mandate districts, and nominees of United Russia did not participate in every SMD. Thus, the average results of the "party of power" were

unprecedentedly low (24.21%) and the effective number of electoral parties – unprecedentedly high (7.7 by Laakso–Taagepera, 4.4 by Golosov).

The tables below show the data calculated by the formula of Laakso–Taagepera for the effective number of electoral and parliament parties. Calculations by the formula of Golosov were used for robust checks; the values appeared to be almost the same, just a little lower, which confirmed our assumption that the method employed by Golosov is slightly less sensitive for our research purposes, than the formula devised by Laakso and Taagepera.

Our regression analysis of the links between them and the levels of electoral (party) contestation in Russian regions, allowed us to construct the following models (see Table 4).

[Table 4 about here]

The dependent variable – 'the number of parties with more than 1% in the 2016 Duma election', had the highest coefficient of determination – 0.416. But this regression model includes only two predictors – the proportion of the urban population and the number of small businesses per 10,000 people. What is more, the beta coefficient of the number of small businesses is larger (0.426 vs 0.285). This does not mean that businessmen provide more political pluralism in a region, but rather that, higher political pluralism is linked with the creation of a more comfortable climate for business to operate. In general, the larger the city, and the greater the number of small businesses, the higher are the levels of political pluralism.

The dependent variable, 'Percentage of votes for United Russia in the last regional election', on the contrary, had a lower coefficient of determination (0.389), but as many as five predictors – "the share of employees with higher education", "the number of personal cars per 1,000 people", "the share of housing with a hot water supply", "the number of doctors per 10 thousand people", "the number of small businesses per 10,000 people". Two of these predictors ("the share of employees with higher education" and "share of housing with a hot water

supply"), have positive linkage with voting for the "party of power", the rest have three – negative one. The negative links can be explained in the following way: the more economically independent and well-to-do regions were less prone to vote for United Russia. The positive linkage between voting for UR and the share of housing with hot water supply breaks this trend; it can be assumed in this case that hot water supply is a facility that embraces the widest strata of the population, which expressed its gratitude to authorities. The positive linkage between voting for the "party of power" and the share of employees with higher education can be explained by the fact that a significant portion of these employees work for the state, so they are especially subject to administrative pressure when voting, or they have a vested interest in supporting the regime. These results are in line with Rosenfeld's study of the Russian mass protests of 2011-13 where, 'state dependence reduced the likelihood of protest by more than 25% among the middle class and 50% among the non-middle class' (2017, 638).

The effective number of electoral parties as a dependent variable had the same predictors as voting for United Russia and almost the same coefficient of determination (0.383 for calculations by the formula of Laakso–Taagepera, 0.33 as calculated by the formula of Golosov). As expected, the beta coefficients of predictors for the ENEP had opposite signs in comparison to those on voting for UR.

The effective number of parliamentary parties had the lowest coefficient of determination (0.233 by the formula of Laakso–Taagepera, 0.231 by the formula of Golosov) and three predictors – the number of personal cars per 1,000 people, the number of doctors per 10,000 people, and the share of unprofitable organizations. All the beta coefficients had positive signs, demonstrating the connection between the pluralism of regional political regimes, on the one hand, and the well-being of the most well-off strata of the population (the

number of personal cars per 1,000 people and the number of doctors per 10,000 people) and the economic successfulness of a region (the share of unprofitable organizations).

Thus, we can see that the "rudest" indicators of economic success – "Gross Regional Output per capita", "investments in fixed capital per capita", "the average monthly income per capita" – do not predict the level of party pluralism in Russian regions. But more specific indicators – "the number of personal cars per 1000 people", "the share of housing with hot water supply" and "the share of unprofitable organizations" – have positive results. They do not explain the support of the maximal number of parties, but are successful when it comes to the support for United Russia in regional elections and effective numbers of electoral and parliamentary parties. What is more, "the number of personal cars per 1000 people" and "the share of housing with hot water supply" work in the opposite directions: the former – a characteristic of the middle class – works against the monopoly of the 'party of power', the latter – an indicator of well-being of wider strata of the population – on the contrary, is linked with support for United Russia.

The modernisation factor which contributed to political pluralism most effectively appeared to be the level of entrepreneurial activity – more exactly, the number of small business per 10 thousand people – which is a predictor for three indicators of political pluralism: the number of parties with more than 1%, voting for United Russia in regional elections, and the effective number of electoral parties. It was especially strong for the first of these indicators: in the model where the proportion of the urban population was excluded from the analysis its beta coefficient rose to 0.606.

The educational level of the population played its role only for the percentage of votes for United Russia in regional elections and the effective number of electoral parties. But these

indicators of party life in Russian regions are more sophisticated and linked the most of the modernisation factors.

Conclusion

As was discussed in the introduction, for Lipset, modernization is, 'a multidimensional phenomenon.' Thus, we have argued that a true test of the Lipset hypothesis, needs to examine 'the joint effect of all components of modernization, or even their interaction', rather than just focus on one component, such as economic development or education. Our study, by disaggregating and individually testing a wide range of modernisation indices, over and above that of economic growth, has allowed us to provide a more nuanced and fine-grained analysis, of the impact of modernisation on political contestation in Russian regions.

The results of our research demonstrate that, the question of whether the degree of political pluralism in a region depends on the degree of modernization, has a positive answer. All four of the selected multiparty indicators – the number of political parties with more than 1% of the votes in the Duma election, the percentage of votes for United Russia in the last regional election, the effective number of electoral parties (ENEP) and the effective number of parliamentary parties (ENPP) – have predictors among modernization factors (the proportion of the urban population; the number of small businesses per 10,000 people; the employment rate; the share of employees with higher education; the number of personal cars per 1,000 people; the number of doctors per 10,000 people, and so on).

It is significant that more complex tools reflecting the region-wide levels of support for political pluralism and a multiparty system, not only from the general population but also from the regional political elites ('the percentage of votes for United Russia in the last regional election' and 'the effective number of electoral parties in this election') have more predictors

among modernization factors than other multiparty indicators: five against two (in the case of the number of parties with more than 1%) and three (the effective number of parliamentary parties). Moreover, these two factors embrace the broadest circle of modernization aspects: the well-being of population (the number of personal cars, the share of housing with hot water supply, number of doctors per 10 thousand people), its educational level (the share of employees with higher education) and development of business (the number of small businesses per 10 thousand people).

We can also see that the level of entrepreneurial activity of the population remains the main modernization factor influencing the level of political pluralism in Russian regions. It acts as a predictor for three indicators of political pluralism: the number of political parties with more than 1% of the votes in the Duma election, the percentage of votes for United Russia in the last regional election, and the effective number of electoral parties (ENEP). Moreover, it has the largest beta coefficient for the number of political parties with more than 1% and the ENEP. This supports the argument that the weak levels of entrepreneurial activity remain the main problem for Russia's modernization. When the level of business activity in Russia reaches the levels of Western democracies, it will probably cease to be a predictor for the level of political pluralism in the country.

However, whilst our study shows that modernization has a positive influence on the level of political pluralism in Russian regions, its impact is rather limited in nature, even in the case of the simplest indicator – the number of parties with more than 1% in the 2016 Duma election. At best, modernisation factors can explain the electoral behaviour of slightly more than 40% of the electorate. The rest must be explained by other factors – for example, the specifics of the Russian electorate's political culture, the nature of the political regime, including the degree of administrative pressure, and so on. But this is for another study.

References

Bernahagen, P. (2009), 'Democracy, Business and the Economy, in C. W. Haerpfer, P. Bernhagen, P., Inglehart, R. F. and C. Welzel, *Democratization*, Oxford: Oxford University Press, pp. 107-126.

Gaivoronskii, Yu. (2015), 'Regional'nye Politicheskie Rezhimy v Rossii: Kontseptual'nye Novatsii i Vozmozhnosti Izmereniya', *Politiya (Ru)*, No.2 (77), pp. 21-37.

Gel'man, V. (2015), *Authoritarian Russia: Analysing Post-Soviet Regime Changes*, Pittsburgh: Pittsburgh Press.

Gill, G. (2015), *Building an Authoritarian Polity: Russia in Post-Soviet Times*, Cambridge: Cambridge University Press.

Golosov, G. (2010), 'The Effective Number of Parties: A New Approach', *Party Politics*, Vol.16, No.2, pp. 171-192.

Gontmakher, E. and Ross, C. (2015), 'The Middle Class and Democratisation in Russia', *Europe-Asia Studies*, Vol.67, No.2, March 2015, pp. 269-284.

Grugel, J. (2002), *Democratization: A Critical Introduction*, New York: Palgrave Macmillan.

Hadenius, A. (1992), *Democracy and Development*, Cambridge: Cambridge University Press.

Hood, S. J. (2004), *Political Development and Democratic Theory*, Armonk, New York, London: M. E. Sharpe.

Inglehart, R. F. and C. Welzel (2009), 'Political Culture, Mass Beliefs, and Value Change', in C. W. Haerpfer, P. Bernhagen, R. F. Inglehart, and C. Welzel, *Democratization*, Oxford: Oxford University Press.

Inglehart, R. F. and C. Welzel (2009a), 'Development and Democracy: What We Know about Modernization Today', *Foreign Affairs*, March-April, pp. 1-15.

Inglehart, R.F. (2017), 'Modernisation and Democracy', in V. Inozementsev and P. Dutkiewicz (eds.), *Democracy Versus Modernization: A Dilemma for Russia and for the World*, New York: Routledge, pp. 123-144.

Korgunyuk, Yu. (2015), Electoral Cleavage Map of Russia: Based on an Analysis of the 2011 State Duma Election and the Regional Elections of 2012–14, *European Politics and Society*, Vol.16, No.4, pp. 467-487.

Korgunyuk, Yu., Ross, C. and S. Shpagin (2018), Party Reforms and the Unbalancing of the Cleavage Structure in Russian Regional Elections, 2012-15, *Europe-Asia Studies*, Vol.70, No.2, pp. 155-181.

Kynev, A. (2017), 'Kachestvo Regional'nykh Politicheskikh Institutov: Popytka Izmereniya', *Politicheskaya Nauka*, No.2, pp. 259-283

Kynev, A. (2017a), 'How the Electoral Policy of the Russian State Predetermined the Results of the 2016 State Duma Elections', *Russian Politics*, Vol.2, No.2, pp. 206–226.

Kynev, A., Lyubarev, A and Maksimov, A. (2017), *Kak Vybirala Rossiya–2016. Rezul'taty Monitoringa Izbiratel'nogo Protsess*, Moscow: Fund Liberal'naya Missiya.

Laakso, M. and R. Taagepera (1979), 'Effective Number of Parties: A Measure with Application to West Europe', *Comparative Political Studies*, Vol.12, No.1, pp. 3–27.

Lankina, et. al. (2016), 'Authoritarian and Democratic Diffusion in Post-Communist Regions,' *Comparative Political Studies,* Vol.49, No.12, pp. 1599-1629.

Lipset, S. M. (1959), 'Some Social Requisites of Democracy: Economic Development and Political Legitimacy', *American Political Science Review,* Vol.53, No.1 (March), pp. 69-105.

Molinar, J. (1991), 'Counting the Number of Parties: An Alternative Index', *The American Political Science Review*, Vol.85, No.4, pp. 1383–1391.

Moraski, B., and W. Reisinger (2003), 'Explaining Electoral Competition across Russia's

Regions', *Slavic Review*, Vol.62, No.2, pp. 278–301.

Obydenkova & Libman (2013), 'National Autocratization and Sub-National Democracy: Evidence from Russia´s Parliamentary Elections 2011,' *Acta Politica*, Vol.48, No.4, pp. 459-489.

Obydenkova & Libman (2015), *Causes and Consequences of Democratization: the Regions of Russia*, Routledge: London-New York.

Panov, P. and Ross, C. (2013), 'Patterns of Electoral Contestation in Russian Regional Assemblies: Between "Competitive" and "Hegemonic" Authoritarianism', *Demokratizatsiya: The Journal of Post-Soviet Democratization*, Vol.21, No.3, 2013, pp. 369-400.

Panov, P. and Ross, C. (2018), 'The Range and Limitation of Sub-National Regime Variations under Electoral Authoritarianism: The Case of Russia', *Regional and Federal Studies*, published online 10 October: DOI: 10.1080/13597566.2018.1530221.

Petrov, N. and Titkov, A. (2013), *Reiting Demokratichnosti Regionov Moskovskogo Tsentra Karnegi: 10 let v Stroyu*, Moscow: Carnegie Moscow Centre.

Regiony Rossii: Sotsial'no-Ekonomicheskie Pokazateli, 2016. Statisticheskii Sbornik, Moscow: Rosstat, 2016)

Reisinger, W., and Moraski, B. (2010), 'Regional Changes and Changing Regional Relations' in, V. Gel'man and C. Ross, *The Politics of Sub-National Authoritarianism in Russia*, Farnham, UK: Ashgate, pp. 67–84

Rosenfeld, B (2017), 'Reevaluating the Middle-Class Protest Paradigm: A Case-Control Study of Democratic Protest Coalitions in Russia', *American Political Science Review*, Vol.111, No. 4, November 2017, pp. 637-652.

Ross, C. (2018), 'Regional elections in Russia: instruments of authoritarian legitimacy or instability?,' *Palgrave Communications*, Vol.4 (75), 2018, pp. 1-9.

Saikkonen, I. (2016), "Variation in Subnational Electoral Authoritarianism: Evidence from the Russian Federation," *Democratization*, Vol.23, No.3, pp. 437–458.

Titkov, A. (2016), 'Indeks Demokratii dlya Regionov Rossii: Dinamika 1990-2000-kh godov', *Vestnik Perm University: Politologiya*, No.2, pp. 81-104st

Treisman, D. (2015), 'Income, Democracy, and Leader Turnover', *American Journal of Political Science*, Vol. 59, No. 4 (October), pp. 927-942

Turovsky, R. (2015), 'The Systemic Opposition in Authoritarian Regimes: A Case Study of Russian Regions', in C. Ross (ed.), *Systemic and Non-Systemic Opposition in the Russian Federation. Civil Society Awakens?,* Farnham: Ashgate, pp. 121-138.

Welzel, C. (2009), 'Theories of Democratization', in C. W. Haerpfer, P. Bernhagen, R. F. Inglehart, and C. Welzel, *Democratization,* Oxford: Oxford University Press, pp. 74-91.

Wucherpfennig, J. and Deutsch, F. (2009), 'Modernization and Democracy: Theories and Evidence Revisited', *Living Reviews in Democracy* (democracy.livingreviews.org), pp. 1-9.

Tables and Figure

Table 1. Multiparty Indicators of Russian Regions

Regions	Number of parties with more than 1% in the Duma election (2016)	Percentage of votes for United Russia in last regional elections	ENEP Laakso–Taagepera	ENEP Golosov	ENPP Laakso–Taagepera	ENPP Golosov
Adygea	6	58.31	2.57	1.88	1.56	1.30
Altai Republic	7	44.7	4.23	3.00	1.65	1.35
Bashkortostan	6	76.06	1.68	1.35	1.53	1.29
Buryatia	7	43.34	4.15	3.02	1.64	1.35
Dagestan	3	75.51	1.70	1.37	1.51	1.27
Ingushetia	8	75.94	1.70	1.38	1.48	1.26
Kabardino-Balkaria	3	65.28	2.18	1.25	1.86	1.48
Kalmykia	6	51.34	3.40	2.47	2.02	1.58
Karachay-Cherkessia	4	73.21	1.80	1.44	1.77	1.42
Karelia	9	33.2	4.96	3.76	2.12	1.64
Komi Republic	8	58.05	2.71	1.93	1.40	1.21
Crimea	7	70.18	1.98	1.49	1.14	1.07
Mari El	6	65.4	2.19	1.65	1.27	1.14
Mordovia	4	83.7	1.41	1.21	1.14	1.07
North Ossetia	6	59.19	2.55	1.90	2.15	1.68
Yakutia	7	47.41	3.64	2.60	1.64	1.35
Tatarstan	5	84.24	1.40	1.20	1.51	1.27
Tyva	4	84.03	1.41	1.19	1.12	1.06
Udmurtia	6	63.16	2.30	1.69	1.37	1.20
Khakassia	7	46.32	3.69	2.64	1.81	1.45
Chechnya	3	87.66	1.29	1.15	1.22	1.11
Chuvashia	6	50.7	3.21	2.27	1.47	1.25
Altai Oblast	7	34.08	4.23	3.38	2.10	1.63
Transbaikal Krai	7	43.09	4.21	3.00	1.71	1.39
Kamchatka Krai	7	48.31	3.18	2.30	1.59	1.32
Krasnodar Krai	9	70.78	1.89	1.47	1.19	1.10
Krasnoyarsk Krai	9	38.53	4.53	3.42	1.84	1.47
Perm Krai	9	43.75	3.78	2.69	1.76	1.42
Primorye Krai	9	39.47	4.00	3.03	2.23	1.73
Stavropol Krai	7	53.07	2.92	2.09	1.46	1.24
Khabarovsk Krai	9	57.14	2.72	1.90	1.41	1.22
Amur Oblast	7	35.93	3.88	3.37	1.89	1.51
Arkhangelsk Oblast	9	40.69	4.67	3.32	2.03	1.59
Astrakhan Oblast	7	42.31	3.66	2.73	2.03	1.59

Belgorod Oblast	6	62.36	2.39	1.77	1.34	1.18
Bryansk Oblast	7	71.9	1.89	1.45	1.20	1.10
Vladimir Oblast	9	44.33	4.26	3.01	1.39	1.21
Volgograd Oblast	8	60.09	2.55	1.84	1.86	1.48
Vologda Oblast	8	37.27	4.34	3.38	1.77	1.42
Voronezh Oblast	7	73.84	1.77	1.39	1.34	1.18
Ivanovo Oblast	8	55.77	2.93	2.13	1.38	1.20
Irkutsk Oblast	7	42.36	4.18	3.21	1.97	1.55
Kaliningrad Oblast	10	41.17	4.23	3.08	2.53	1.92
Kaluga Oblast	8	56.99	2.83	1.98	1.62	1.33
Kemerovo Oblast	4	86.21	1.34	1.16	1.09	1.05
Kirov Oblast	7	35.9	4.20	3.31	2.00	1.57
Kostroma Oblast	8	50.96	3.30	2.35	1.47	1.25
Kurgan Oblast	7	56.74	2.70	1.96	1.45	1.24
Kursk Oblast	8	50.17	3.09	2.22	1.60	1.32
Leningrad Oblast	8	51.25	3.15	2.26	1.53	1.28
Lipetsk Oblast	7	53.88	3.01	2.18	1.46	1.24
Magadan Oblast	7	57.71	2.67	1.64	1.49	1.26
Moscow Oblast	11	43.15	4.16	3.03	1.67	1.36
Murmansk Oblast	8	39.2	4.42	3.32	1.59	1.32
Nizhny Novgorod Oblast	7	54.91	2.91	2.12	1.46	1.25
Novgorod Oblast	8	38.92	4.04	3.03	2.12	1.64
Novosibirsk Oblast	8	44.56	3.55	1.60	2.05	1.62
Omsk Oblast	8	36.3	3.93	3.24	1.88	1.49
Orenburg Oblast	6	41.05	3.69	2.87	1.80	1.44
Oryol Oblast	6	45.96	3.26	2.41	1.88	1.49
Penza Oblast	6	68.99	1.99	1.53	1.26	1.13
Pskov Oblast	8	44.14	3.71	2.74	1.72	1.39
Rostov Oblast	7	62.45	2.37	1.77	1.27	1.14
Ryazan Oblast	7	62.73	2.35	1.74	1.26	1.13
Samara Oblast	9	51.02	3.16	2.27	1.46	1.24
Saratov Oblast	6	66.84	2.09	1.60	1.47	1.25
Sakhalin Oblast	8	44.64	3.98	2.81	1.51	1.27
Sverdlovsk Oblast	9	40.26	4.22	3.14	1.85	1.47
Smolensk Oblast	8	41.01	4.54	3.29	1.74	1.41
Tambov Oblast	6	62.25	2.38	1.77	1.28	1.15
Tver Oblast	8	46.47	3.47	2.53	1.62	1.33
Tomsk Oblast	10	41.21	3.95	2.99	1.75	1.41
Tula Oblast	8	65.98	2.17	1.63	1.34	1.18
Tyumen Oblast	4	56.59	2.67	1.97	1.49	1.26
Ulyanovsk Oblast	7	57.62	2.77	1.99	1.33	1.17
Chelyabinsk Oblast	8	56.16	2.74	1.94	1.47	1.25
Yaroslavl Oblast	10	42.25	4.75	3.29	1.55	1.27

Moscow	11	24.21	7.77	4.40	2.22	1.73
St. Petersburg	11	41.25	4.39	3.16	1.87	1.49
Nenets Autonomous District	10	45.62	3.76	2.69	1.99	1.57
Jewish Autonomous Oblast	6	42.43	3.36	2.55	1.97	1.55
Khanty-Mansiysk Autonomous District	9	46.87	3.29	2.39	1.74	1.41
Chukotsky Autonomous District	7	61.66	2.33	1.68	2.06	1.61
Yamal-Nenets Autonomous District	5	70.11	1.93	1.49	1.47	1.25
Sevastopol	7	76.67	1.68	1.35	1.18	1.09

Table 2. Correlation Matrix of the Multiparty Indicators of Russian Regions

Variable	Correlations (Spreadsheet1) Marked correlations are significant at p < ,05000 N=85 (Casewise deletion of missing data)							
	Means	Std.Dev.	Number of parties with more than 1% in the Duma election (2016)	Percentage of votes for United Russia in regional elections	ENEP (Laakso-Taag)	ENEP (Golosov)	ENPP (Laakso-Taag)	ENPP (Golosov)
Number of parties with more than 1% in the Duma election (2016)	7.235	1.750	1	**-0.649**	**0.671**	**0.634**	**0.368**	**0.364**
Percentage of votes for United Russia in regional elections	54.076	14.238	**-0.649**	1	**-0.936**	**-0.936**	**-0.707**	**-0.693**
ENEP (Laakso-Tag)	3.135	1.100	**0.671**	**-0.936**	1	**0.963**	**0.668**	**0.659**
ENEP (Golosov)	2.297	0.750	**0.634**	**-0.936**	**0.963**	1	**0.662**	**0.650**
ENPP (Laakso-Tag)	1.629	0.307	**0.368**	**-0.707**	**0.668**	**0.662**	1	**0.999**
ENPP (Golosov)	1.348	0.184	**0.364**	**-0.693**	**0.659**	**0.650**	**0.999**	1

Figure 1. Classification (hierarchical tree) of Russian regions by their multiparty sympathies

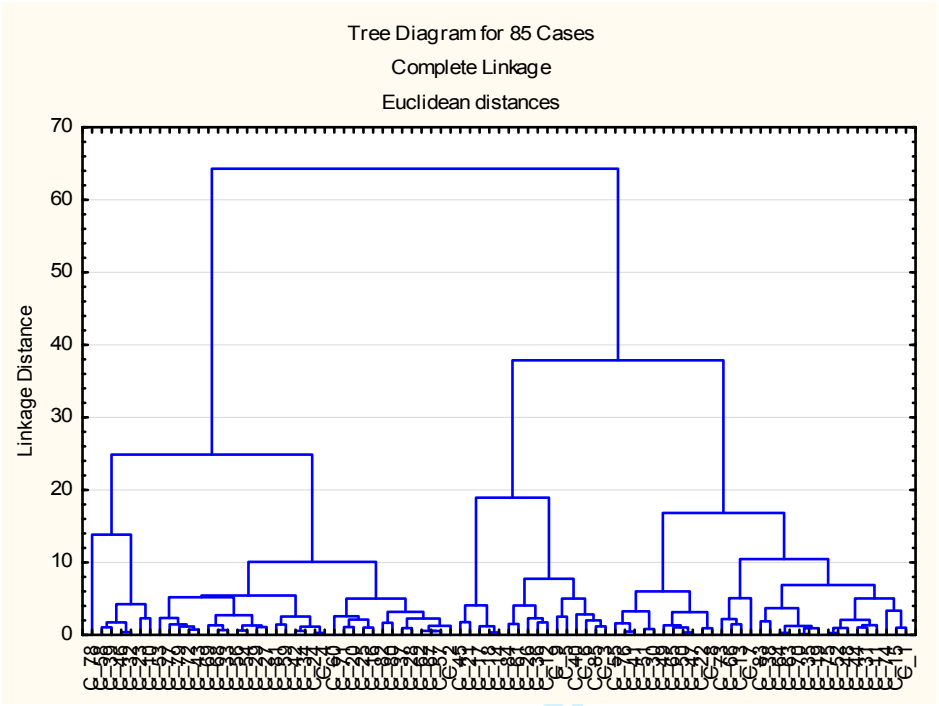

Table 3. Clusters of Russian Regions by their Multiparty Sympathies

Region	Cluster affiliation (2 clusters)	Proximity to the cluster centre (2 clusters)	Cluster affiliation (4 clusters)	Proximity to the cluster centre (4 clusters)
Cluster 1				
Altai Republic	1	0.85	1	1.87
Buryatia	1	0.54	1	1.25
Karelia	1	5.14	1	4.03
Yakutia	1	2.09	1	3.19
Khakassia	1	1.56	1	2.66
Altai Krai	1	4.68	1	3.60
Transbaikal Krai	1	0.56	1	1.14
Krasnoyarsk Krai	1	2.49	1	1.39
Perm Krai	1	0.52	1	1.36
Primorye Krai	1	2.02	1	0.95
Amur oblast	1	3.76	1	2.70
Arkhangelsk Oblast	1	1.48	1	0.53
Astrakhan Oblast	1	0.77	1	0.88
Vladimir Oblast	1	0.73	1	1.65
Vologda Oblast	1	3.06	1	1.96
Irkutsk Oblast	1	0.77	1	0.88
Kaliningrad Oblast	1	1.51	1	0.92
Kirov Oblast	1	3.78	1	2.71
Moscow Oblast	1	1.49	1	1.70
Murmansk Oblast	1	2.11	1	1.02
Novgorod Oblast	1	2.23	1	1.13
Novosibirsk Oblast	1	0.63	1	1.73
Omsk Oblast	1	3.54	1	2.44
Orenburg Oblast	1	1.55	1	1.15
Oryol Oblast	1	1.68	1	2.68
Pskov Oblast	1	0.40	1	1.51
Sakhalin Oblast	1	0.63	1	1.74
Sverdlovsk Oblast	1	1.64	1	0.59
Smolensk Oblast	1	1.24	1	0.31
Tver Oblas	1	1.56	1	2.68
Tomsk Oblast	1	1.46	1	0.89
Yaroslavl oblast	1	1.20	1	1.08
Moscow	1	9.89	1	8.78
St. Petersburg	1	1.84	1	1.38
Nenets Autonomous District	1	1.49	1	2.40
Jewish Autonomous Oblast	1	1.16	1	1.34
Khanty-Mansiysk Autonomous District	1	1.84	1	2.91
Cluster 2				

Kalmykia	1	4.12	2	1.90
Chuvashia	1	3.82	2	2.15
Kamchatka Krai	1	2.55	2	3.26
Stavropol Krai	1	4.90	2	0.88
Kostroma Oblast	1	3.81	2	1.98
Kursk Oblast	1	3.42	2	2.36
Leningrad Oblast	1	3.96	2	1.83
Lipetsk Oblast	1	5.30	2	0.49
Nizhny Novgorod Oblast	1	5.81	2	0.13
Samara Oblast	1	3.87	2	2.10
Cluster 3				
Adygea	2	4.50	2	1.86
Komi Republic	2	4.72	2	1.67
North Ossetia	2	4.08	2	2.29
Khabarovsk Krai	2	5.27	2	1.47
Volgograd Oblast	2	3.72	2	2.67
Ivanovo Oblast	2	5.85	2	0.63
Kaluga Oblast	2	5.24	2	1.15
Kurgan Oblast	2	5.30	2	0.97
Magadan Oblast	2	4.82	2	1.46
Tyumen Oblast	2	5.48	2	1.85
Ulyanovsk Oblast	2	4.87	2	1.42
Chelyabinsk Oblast	2	5.65	2	0.78
Cluster 4				
Kabardino-Balkaria	2	1.92	3	1.75
Crimea	2	1.50	3	2.12
Mari El	2	0.96	3	0.37
Udmurtia	2	2.08	3	1.44
Krasnodar Krai	2	2.23	3	2.72
Belgorod Oblast	2	2.48	3	1.84
Bryansk Oblast	2	2.34	3	2.97
Penza Oblast	2	0.86	3	1.51
Rostov Oblast	2	2.46	3	1.81
Ryazan Oblast	2	2.32	3	1.67
Saratov Oblast	2	0.27	3	0.47
Tambov Oblast	2	2.53	3	1.89
Tula Oblast	2	1.10	3	0.80
Chukotsky Autonomous District	2	2.87	3	2.22
Yamal-Nenets Autonomous District	2	1.54	3	2.17
Cluster 5				
Bashkortostan	2	4.39	4	1.90
Dagestan	2	4.42	4	2.34
Ingushetia	2	4.41	4	2.42

Karachay-Cherkessia	2	3.17	4	3.31
Mordovia	2	8.28	4	2.05
Tatarstan	2	8.50	4	2.26
Tyva	2	8.45	4	2.21
Chechnya	2	10.32	4	4.09
Voronezh Oblast	2	3.30	4	3.11
Kemerovo Oblast	2	9.53	4	3.28
Sevastopol	2	4.71	4	1.83

Table 4. Regression OLS Model of the Links Between Modernizations Factors and the Levels of Political Pluralism in Russian Regions (85 observations for 1st and 4th columns, 84 observations for 2nd and 3rd columns)

	1 Number of parties with more than 1% in the Duma election		2 Percentage of votes for United Russia in regional elections		3 Effective Number of electoral parties		4 Effective Number of parliamentary parties	
	Multiple R^2	Adjusted R^2	Multiple R^2	Adjusted R^2	Multiple R^2	Adjusted R^2	Multiple R^2	Adjusted R^2
	0,416	0,401	0,389	0,349	0,383	0,343	0,233	0,204
Modernization factors	**Beta-coefficients and standard error**							
	Beta	St.Err.	Beta	St.Err.	Beta	St.Err.	Beta	St.Err.
Proportion of the urban population	0,285*	0,109						
Share of employees with higher education			0,257**	0,097	–0,243**	0,098		
Number of personal cars per 1000 people			–0,335*	0,102	0,259**	0,102	0,312*	0,100
Share of housing with hot water supply			0,230*	0,100	–0,273*	0,101		
Number of doctors per 10 thousand people			–0,324**	0,101	0,323*	0,102	0,309*	0,099
Number of small businesses per 10 thousand people	0,426**	0,109	–0,248*	0,104	0,304*	0,105		
Share of unprofitable organizations (%)							0,213**	0,101

* $P \leq 0,05$
** $P \leq 0,01$